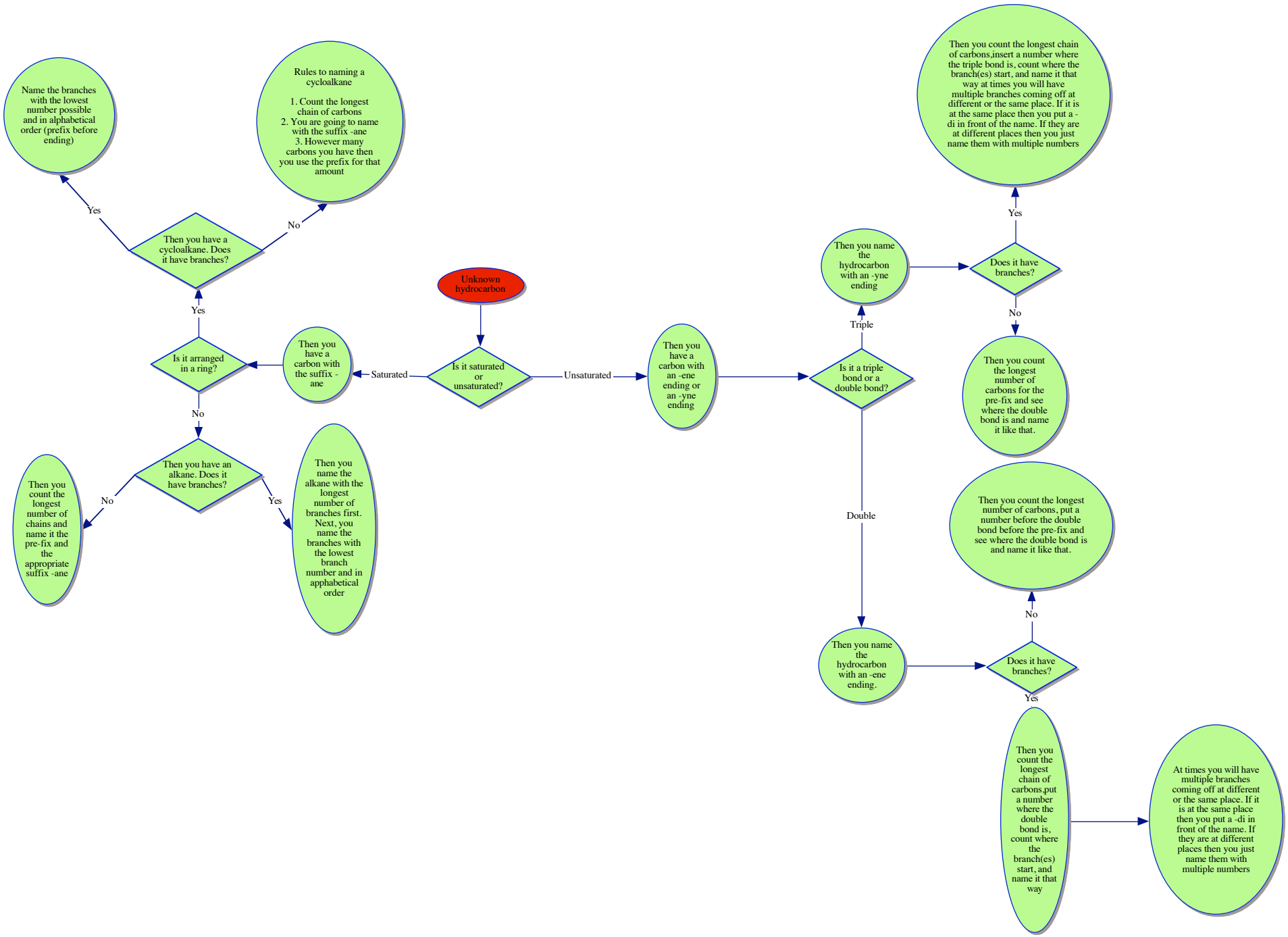
Unknown hydrocarbon
Is it saturated or unsaturated?
Saturated
Unsaturated
Then you have a carbon with the suffix -ane
Then you have a carbon with an -ene ending or an -yne ending
Is it arranged in a ring?
Is it a triple bond or a double bond?
Triple
Double
Then you name the hydrocarbon with an -yne ending
Then you name the hydrocarbon with an -ene ending.
Does it have branches?
Does it have branches?
Then you have a cycloalkane. Does it have branches?
Then you have an alkane. Does it have branches?
Yes
No
Yes
No
Yes
No
Yes
No
Name the branches with the lowest number possible and in alphabetical order (prefix before ending)
Rules to naming a cycloalkane
1. Count the longest chain of carbons
2. You are going to name with the suffix -ane
3. However many carbons you have then you use the prefix for that amount
Then you count the longest number of chains and name it the pre-fix and the appropriate suffix -ane
Then you name the alkane with the longest number of branches first. Next, you name the branches with the lowest branch number and in apphabetical order
Then you count the longest number of carbons for the pre-fix and see where the double bond is and name it like that.
Then you count the longest chain of carbons,insert a number where the triple bond is, count where the branch(es) start, and name it that way at times you will have multiple branches coming off at different or the same place. If it is at the same place then you put a -di in front of the name. If they are at different places then you just name them with multiple numbers
Then you count the longest number of carbons, put a number before the double bond before the pre-fix and see where the double bond is and name it like that.
Then you count the longest chain of carbons,put a number where the double bond is, count where the branch(es) start, and name it that way
At times you will have multiple branches coming off at different or the same place. If it is at the same place then you put a -di in front of the name. If they are at different places then you just name them with multiple numbers